



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,684	02/27/2002	Bo Shen	10016868-1	1394

7590 10/21/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

SENFU, BEHROOZ M

ART UNIT PAPER NUMBER

2613

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/085,684

Applicant(s)

SHEN ET AL.

Examiner

Behrooz Senfi

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 - 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim (US 2002/0126752).

---

Regarding claim 1, Kim '752 discloses, "reducing the resolution of media data" (i.e. fig. 3) comprising: "receiving input data comprised of compressed data for a frame of a plurality of frames ....." (i.e. fig. 2, 101), and "down-sampling the input data to generate compressed down-sampled data at a second resolution ....." (i.e. fig. 4), and "decoding the compressed down-sampled video data ....." (i.e. page 4, section 0063), and "up-sampling the decompressed down-sampled video data to generate decompressed video data at a resolution corresponding to the first resolution ....." (i.e. page 11, section 0199).

---

Regarding claims 2 – 3, 16 and 21, Kim '752 discloses, "generating motion vectors for frame at the second resolution ....." (i.e. fig. 8, MC 16) and "averaging the motion vectors ....." in claim 3" reads on (i.e. page 4, section 0056).

Regarding claims 4 – 7, 17 – 18 and 22 - 24, the limitations claimed “compression according to a discrete cosine transform DCT .....” reads on (i.e. fig. 8, DCT 32), and “determining a bit-rate for the output data stream using the DCT coefficients in claim 5) reads on (i.e. fig. 3, bit-rate controller 600); and “input data are encode according to a first compression scheme and the output data stream are encoded according to a second compression scheme, in claim 6” (i.e. page 4, section 0057).

Regarding claims 8 and 10 - 14, the limitations claimed are substantially similar to claim 1 therefore the ground for rejecting claim 1 also applies here. Furthermore, as for “selecting data processing functions according to the number of MB’s” please see (page 4, sections 0052 – 0055), and “thresholding ..... in claims 13 - 14” reads on (fig. 5, comparison and thresholding).

Regarding claim, 9 and 20, the limitations claimed “determining a coding type .....” reads on (i.e. fig. 5, page 3, section 0047).

Regarding claim 15, the limitations “decoding the compressed down-sampled data ..... and up-sampling the decompressed down-sampled data” reads on (page 10, section 0194).

Regarding claim 19, the limitations claimed are substantially similar to claim 1, therefore the ground for rejecting claim 1 also applies here.

Regarding claims 25 – 29, the limitations claimed are substantially similar to claims 1 – 4, and are the computer readable program of the claims, therefore the grounds for rejecting claims 1 – 4 also applies here, since the video transcoding

Art Unit: 2613

apparatus as taught by Kim, are computer implemented and the software to carry out the instructions are necessitated in the system.

**Conclusion**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(703)305-0132**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chris Kelley** can be reached on **(703)305-4856**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**Or faxed to:**


**(703) 872-9314**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

B. S. S.

10/17/2004

  
CHRIS KELLEY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600